

Appln. No. : 09/945,377
Filed : August 31, 2001

REMARKS

In response to the Office Action mailed July 2, 2003, Applicant respectfully requests the Examiner to reconsider the above-captioned application in view of the foregoing amendments and the following comments.

By this Amendment, Applicant has canceled Claims 1-18 without prejudice and has added new Claims 19-36 to clarify preferred embodiments of the present invention and further distinguish over the cited art. In addition, Applicant has provided replacement sheets to address the Examiner's objections to the drawings. No new matter is added by this Amendment.

All of the Examiner's grounds for rejection have now been addressed and Applicant therefore respectfully requests that the Examiner pass the pending claims to allowance.

Objection to Drawings

The Examiner objected to the drawings under 37 CFR 1.83(a) for failing to show reference numbers 405a, 405b, 422 and 442, as described in the specification. Furthermore, the Examiner asserts that the detail structure of the stop 260 is unclear. In particular, the Examiner asserts that it is unclear how the stop 260 is secured to the aperture 435.

Accordingly, a clean set of amended drawings is filed herewith which includes replacement sheets. In the replacement sheets, Figures 1, 2 and 4-7 have been amended to include missing reference numbers. Furthermore, arrowheads have been added to various reference numbers (i.e., 400, 405, 415, 420 and 440) to clarify the structure described in the specification.

Finally, a new reference number 262 has been added to the structure of stop 260 to clarify that a hole is formed in the stop 260 for receiving a fastener 250 such that the stop 260 can be secured between the plates 210 and 215. In addition, the paragraph beginning at page 6, line 10 of the specification has been amended to clarify the relationship between the stop, plates and fasteners in response to the Examiner's objection. No new matter has been added by these amendments.

Accordingly, Applicant believes that all the Examiner's objections with respect to the drawings have now been addressed.

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Objection to Claim 1

The Examiner objected to Claim 1 because the phrase "upper and lower hinge portions" lacked a proper antecedent basis. Claim 1 has been canceled without prejudice, thereby rendering the objection moot.

Rejection of Claims 1-5 and 7 under 35 U.S.C. § 103(a)

The Examiner rejected Claims 1-5 and 7 as being unpatentable over Young, David E. et al. in view of Paez. The Examiner asserts that Young, David E. et al. shows every claimed feature of Claim 1 except for the upper portion, lower portion and straps. The Examiner further asserts that Paez teaches these structures and that it would have been obvious to combine the references to provide the claimed features of Claim 1. As for Claims 4, 5 and 7, the Examiner asserts that Paez shows a hinge deflector positioned on the medial side of the brace.

Claims 1-5 and 7 have been canceled without prejudice, thereby rendering the rejection moot. Furthermore, to clearly distinguish over the cited art and bring the application to allowance, new Claims 19-36 recite a combination of features that are neither described nor suggested in the cited references. Young, David E. et al. disclose a pair of vertical side walls 14 joined by an anterior wall or front wall 15 for stabilizing the interior mechanism of the hinge assembly. A housing 16 joins the posterior ends of the side wall. An adjustable screw extends through the housing for limiting the range of hinge movement. Paez discloses a hinge body wherein plates 90, 92 encase the hinged connection between the upper and lower hinge arms 50, 52. The plates disclosed in Paez are formed with a slot in which a rack 114 slides back and forth. Screws 106, 108 are provided for controlling the angle of flexion and extension of the hinge.

In contrast, preferred embodiments of the present invention provide a hinge deflector located between the person's knee and the medial hinge, wherein the hinge deflector has an outer side formed with a first projection that extends around a front edge of the medial hinge and has a curved surface for deflecting objects. Neither of the cited references teaches or suggests a hinge deflector having a projection with a curved surface for deflecting objects away from the hinge. Accordingly, Young, David E. et al. in view of Paez fails to disclose each and every element of

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Applicant's claimed invention and therefore cannot be used to support a rejection of the pending claims under 35 U.S.C. § 103(a).

Rejection of Claims 1-10 and 12 under 35 U.S.C. § 103(a)

The Examiner rejected Claims 1-10 and 12 as being unpatentable over PCT publication WO 01/10360. Claims 1-10 and 12 have been canceled without prejudice, thereby rendering the rejection moot. Furthermore, PCT publication WO 01/10360 merely discloses a knee brace having a medial hinge that is encased between first and second support plates 65, 67. The purpose of the first and second support plates is to provide stability to the hinge components.

In contrast, preferred embodiments of the present invention provide a hinge deflector located between the person's knee and the medial hinge which includes a projection that extends around the front edge of the medial hinge and has a curved surface for deflecting external objects. Such a hinge deflector is neither described nor suggested in PCT publication WO 01/10360. Accordingly, PCT publication WO 01/10360 (in combination with the other cited references) cannot be used to properly support a rejection of the pending claims under 35 U.S.C. § 103(a).

Rejection of Claim 14 under 35 U.S.C. § 103(a)

The Examiner rejected Claim 14 as being unpatentable over Paez in view of Young, David E. et al., or Borig et al., or Kausek et al. Claim 14 has been canceled without prejudice, thereby rendering the rejection moot. Furthermore, as discussed above, Paez neither discloses nor suggests the features recited in Applicant's new claims. Young, David E. et al., and Borig et al., and Kausek et al. also fail to disclose the features of the claimed invention. Accordingly, the cited combination of references cannot be used to properly reject Applicant's claimed invention under 35 U.S.C. § 103(a).

Rejection of Claim 16 under 35 U.S.C. § 103(a)

The Examiner rejected Claim 16 as being unpatentable over Paez and further in view of Knoth or Shook or Mason et al. In particular, the Examiner asserts that Paez discloses all the features with the exception of the ribs. The Examiner further asserts that Knoth or Shook or Mason et al. disclose ribs. Claim 16 has been canceled without prejudice, thereby rendering the

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rejection moot. Furthermore, as discussed above, Paez fails to teach or suggest anything about a hinge deflector having a projection with a curved surface for deflecting objects away from the hinge. Accordingly, the cited combination of references fails to disclose each and every element of the claimed invention and therefore cannot be used to properly reject Applicant's claimed invention under 35 U.S.C. § 103(a).

Rejection of Claims 1-13, 15, 17 and 18 under 35 U.S.C. § 102(b)

The Examiner rejected Claims 1-13, 15, 17 and 18 as being anticipated by Paez. Claims 1-13, 15, 17 and 18 have been canceled without prejudice, thereby rendering the rejection moot. Furthermore, in order to bring the pending claims to allowance, new Claims 19-36 have been added and recite a combination of features that are clearly distinguishable over Paez.

As discussed above, Paez merely discloses a hinge body wherein plates 90, 92 encase the hinged connection between the upper and lower hinge arms 50, 52. The plates also house a rack 114 that is used to control the limits of the hinge movement. However, Paez fails to teach or suggest anything about a deflector located between a person's knee and a medial hinge wherein the deflector has an outer side that includes a projection extending around a front edge of the hinge and having a curved surface shaped for deflecting objects. Accordingly, Paez cannot be used to properly support a rejection of the pending claims under 35 U.S.C. § 102(b).

Rejection of Claims 1-14 under 35 U.S.C. § 102(b)

The Examiner rejected Claims 1-14 as being anticipated by Bodine. Claims 1-14 have been canceled without prejudice, thereby rendering the rejection moot. Furthermore, in order to bring the pending claims to allowance, new Claims 19-36 have been added and recite a combination of features that are clearly distinguishable over Bodine.

Bodine discloses a device for maintaining extension of the knee joints of comatose, debilitated or bedridden patients. The device includes a spring hinge 16 that is used to interconnect the left upper rigid member with the left lower rigid member. The spring hinge provides a tension adjustment means 48 and a tension indicator window 50 such that the tension thereof may be varied and monitored as desired. The spring hinge biases the upper and lower rigid member to an extended non-bent configuration.

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In contrast to Applicant's claimed invention, Bodine neither teaches nor suggests a knee brace having a hinge deflector for preventing interference of the medial hinge with an external object. As discussed above, the device disclosed by Bodine is intended for maintaining extension of the knee joints for comatose, debilitated or bedridden patients. Accordingly, the device disclosed by Bodine would never have the need for a hinge deflector and was not designed for that purpose. In particular, Bodine does not disclose a hinge deflector adapted to be worn between a person's knee and a medial hinge. Furthermore, Bodine does not disclose a hinge deflector formed with a projection having a curved surface adapted for deflecting external objects, as claimed by Applicant. Accordingly, Bodine cannot be used to properly support a rejection of the pending claims under 35 U.S.C. § 102(b).

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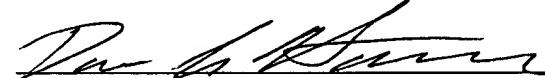
CONCLUSION

In light of the foregoing amendments to the claims and the above remarks, this application is now in condition for allowance, and such action is respectfully requested. Should the Examiner have any questions, the Examiner is encouraged to contact the attorney of record at the telephone number indicated below.

Respectfully submitted,

KNOBBE, MARTENS, OLSON & BEAR, LLP

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By: 

David L. Hauser
Registration No. 42,643
Attorney of Record
2040 Main Street
Fourteenth Floor
Irvine, California 92614
(949) 721-7624

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